

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1 (currently amended). A radio transmission apparatus, comprising:

an antenna comprised of having first and second linear polarization antenna elements perpendicular to each other;

a modulator that modulates ~~modulating means for modulating~~ transmission data to output a modulated signal; and

a phase controlling means for providing ~~a controller that shifts a phase of said modulated signal by one of 0 degrees and 180 degrees phase difference to the modulated signal corresponding to the transmission data to output according to a value of the transmission data per bit.~~

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2 (currently amended). The radio transmission apparatus according to claim 1, wherein [[the]] said first and second linear polarization antenna elements are located positioned with longitudinal directions thereof crossing.

3 (currently amended). The radio transmission apparatus according to of claim 1, wherein [[the]] said first and second linear polarization antenna elements are located positioned at a spaced interval on a plane with a longitudinal relationship between [[the]] elements indicative of twisted positions.

4 (currently amended). The radio transmission apparatus according to of claim 1, wherein [[the]] said first and second linear polarization antenna elements are located positioned at a spaced interval with a longitudinal relationship between the elements indicative of having an angle.

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5 (currently amended). The radio transmission apparatus according to of claim 1, wherein [[the]] said phase controlling means is multiplying means for multiplying controller comprises a multiplier that multiplies a transmission signal by a reference signal to multiply a reference signal that inverts a polarity of [[the]] said transmission signal corresponding to [[the]] said reference signal.

6 (currently amended). A radio transmission apparatus, comprising:
an antenna comprised of having first and second linear polarization antenna elements perpendicular to each other;

a modulator that modulates ~~modulating means for modulating~~ transmission data to output and outputs a modulated signal;

a spreader that spreads ~~said spreading means for spreading~~ the modulated signal to output a spread signal; and

a phase controller that shifts ~~a phase controlling means for providing a~~ of said spread signal by one of 0 degrees and 180 degrees phase difference to the spread signal corresponding to according to a value of a spreading code to output per chip, said spreading code using a spreading process.

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Cont' 7 (currently amended). The radio transmission apparatus according to of claim 6, wherein [[the]] said first and second linear polarization antenna elements are located positioned with longitudinal directions thereof crossing.

8 (currently amended). The radio transmission apparatus according to of claim 6, wherein [[the]] said first and second linear polarization antenna elements are located positioned at a spaced interval on a plane with a longitudinal relationship between [[the]] elements indicative of twisted positions.

9 (currently amended). The radio transmission apparatus according to of claim 6, wherein [[the]] said first and second linear polarization antenna elements are located

positioned at a spaced interval with a longitudinal relationship between [[the]] elements indicative of having an angle.

10 (currently amended). The radio transmission apparatus ~~according to~~ of claim 6, wherein [[the]] said phase controlling means is multiplying means for multiplying controller comprises a multiplier that multiplies a transmission signal by a reference signal to multiply a reference signal that inverts a polarity of [[the]] said transmission signal corresponding to [[the]] said reference signal.

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11 (currently amended). A radio transmission apparatus, comprising:
an antenna comprised of having a first antenna element and a second antenna element that provide with different planes of polarization;
a modulator that modulates ~~modulating~~ means for modulating transmission data to output and outputs a modulated signal; and
a switch that switches a destination of said modulated signal between ~~said~~ [[the]] first antenna element and [[the]] said second antenna element to input the modulated signal thereto corresponding to the according to a value of ~~said~~ transmission data per bit.

12(currently amended). A radio transmission apparatus, comprising:

an antenna comprised of having a first antenna element and a second antenna element that provide with different planes of polarization;

a modulator that modulates ~~modulating means for modulating~~ transmission data [[to]] output and outputs a modulated signal;

a spreader that spreads ~~said spreading means for spreading~~ the modulated signal to output and outputs a spread signal; and

~~a switch that switches a destination of said spread signal between said the first antenna element and the said second antenna element to input the spread signal thereto corresponding to a spreading code according to a value of a spreading code per chip, said spreading code using a spreading process.~~

13 (currently amended). A radio transmission apparatus, comprising:

an antenna that enables ~~transmits~~ two kinds of polarizations perpendicular to each other and switches ~~said polarizations according to a value of~~ to be transmitted and further ~~enables the polarizations to be switched corresponding to transmission data per bit;~~ and

a modulator that modulates ~~said~~ modulating means for modulating the transmission data ~~to output and outputs~~ a modulated signal.

14 (canceled).

15 (currently amended). A radio reception apparatus, comprising:

a receiver that receives receiving means for receiving a plurality of signals signal transmitted with [[a]] different plane of polarization planes;

an electric field strength detector that detects detecting means for detecting an a received electric field strength of the signal said plurality of signals; and

a determiner that performs determining means for making a data determination by associating a magnitude of said received electric field strength based on a detected result on the by said electric field strength detector with data.

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16 (currently amended). The radio reception apparatus according to of claim 15, wherein said determiner the determining means makes a determination on data itself at the a time of a strong first electric field strength, while with respect to data at the a time of a second electric field strength, weaker than said first weak electric field strength, inverting the said data at the time of said strong first electric field strength is inverted to make a said determination.

17 (currently amended). The radio reception apparatus according to of claim 15, wherein said determiner the determining means comprises a D-flip flop receiving that receives as its input data to be corrected and as its gate input a delayed judged result, and an

X-NOR gate receiving that receives as its inputs an output of the said D-flip flop and the said judged result.

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18 (new). A radio transmission apparatus, comprising:
a modulator that modulates transmission data and outputs a modulated signal;
a spreader that spreads said modulated signal and outputs a spread signal; and
an antenna that transmits two kinds of polarizations perpendicular to each other, and
switches said polarizations according to a value of a spreading code per chip, said spreading
code using a spreading process.
